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wherein 25–95% of said lipid monomers are unpolymerized, further wherein said lipid monomers form lipid assemblies, 5–50% surface exposed negatively charged oxyacid groups present on the lipid monomers of the lipid assemblies, wherein said surface exposed negatively charged oxyacid groups meets the anionic binding requirement of said receptor, one or more surface exposed carbohydrates which selectively bind to said receptor, wherein said one or more surface exposed carbohydrates are selected from the group consisting of sulfated fucooligosaccharide, sialylated fucooligosaccharide, sialylated fucooligosaccharide analog, maltose, lactose, sulfated lactose, sialic acid, fucose, monosaccharides, disaccharides, trisaccharides, tetrasaccharides, and glycopeptides.

25. The lipid assembly of claim 24, wherein said 5–50% surface exposed negatively charged oxyacid groups are

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selected from the group consisting of carboxyl groups and groups of the form  $(XO_n)(O^-)_p$  where  $n+p>2$  and X is an atom capable of binding three or more oxygen atoms.

26. The compositions of claim 25, wherein said X is an atom selected from the group consisting of sulphur and phosphorus.

27. The composition of claim 24, wherein said first cell and said second cell are involved in cell to cell interactions selected from the group consisting of cell adhesion and cell migration.

28. The composition of claim 24, wherein said receptor comprises a selectin selected from the group consisting of P-selectin, L-selectin, and E-selectin.

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